

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Toufic Boubez et al. Application No.: 09/758,112 Filed: January 3, 2001 Title: APPARATUS AND METHOD FOR CATEGORIZING SERVICES USING CANONICAL SERVICE DESCRIPTIONS Attorney Docket No.: RSW920000102US1 (IBM 17)	Conf. No.: 7400 Art Unit: 3691 Examiner: HAMILTON, LALITA M
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Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Appellant's Brief

Appellant submits this Appellant's Brief subsequent to the filing of the Notice of Appeal on August 23, 2011 and in response to the Notice of Panel Decision from Pre-Appeal Brief Review dated October 5, 2011.

(i) Real Party in Interest

International Business Machines Corporation, the assignee of record.

(ii) Related Appeals and Interferences

The following prior appeals may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal:

<u>Application Serial No.</u>	<u>Appeal No.</u>
09/758,112	2009-6740
09/753,964	2007-3758

(iii) Status of Claims

Claims 1-4, 6-14,16-24 and 26-30 are presently rejected. Claims 5, 15, 25 and 31 are canceled. Claims 1-4, 6-14,16-24 and 26-30 are appealed herein.

(iv) Status of Amendments

None.

(v) Summary of Claimed Subject Matter

Claims 1, 11 and 21 are the sole independent claims in this application. Claims 1, 11 and 21 are directed generally to a method, computer program product, and apparatus, respectively, for registering services in a taxonomy.

The support for each claim is mapped below. The support for each claim element noted herein may not be all-inclusive as the specification may contain additional support. In addition, one of skill in the art may read the application and study the drawings and arrive at additional support that is in addition to the support noted herein.

Claim 1

Referring to claim 1 with reference to the page and line numbers of the specification as filed, and to the drawings by reference characters, a method for registering services in a taxonomy comprises:

receiving a registration request at the data processing system, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered (page 23, lines 30-32; page 21, lines 16-19; Figure 8, block 810);

determining if the service description should be registered in the identified category based on a canonical service description associated with the category (page 23, line 32 – page 24, line 7; Figure 8, blocks 830, 840);

registering the service description in the identified category using the data processing system if the determination is that the service description should be registered in the identified category (page 24, lines 7-12; Figure 8, block 870); and

if it is determined that the service description should not be registered in the category, determining whether a request to add a new category is received (page 24, lines 17-19; Figure 8, block 880).

Claim 11

Referring to claim 11 with reference to the page and line numbers of the specification as filed, and to the drawings by reference characters, a computer program product in a computer readable comprises instructions for:

receiving a registration request, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered (page 23, lines 30-32; page 21, lines 16-19; Figure 8, block 810);

determining if the service description should be registered in the identified category based on a canonical service description associated with the category (page 23, line 32 – page 24, line 7; Figure 8, blocks 830, 840);

registering the service description in the identified category if the determination is that the service description should be registered in the identified category (page 24, lines 7-12; Figure 8, block 870); and

determining whether a request to add a new category is received if it is determined that the service description should not be registered in the category (page 24, lines 17-19; Figure 8, block 880).

Claim 21

Referring to claim 21 with reference to the page and line numbers of the specification as filed, and to the drawings by reference characters, an apparatus for registering services in a taxonomy comprises:

means for receiving a registration request, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered (page 23, lines 30-32; page 21, lines 16-19; Figure 8, block 810);

means for determining if the service description should be registered in the identified category based on a canonical service description associated with the category (page 23, line 32 – page 24, line 7; Figure 8, blocks 830, 840);

means for registering the service description in the identified category if the determination is that the service description should be registered in the identified category (page 24, lines 7-12; Figure 8, block 870); and

means for determining whether a request to add a new category is received if it is determined that the service description should not be registered in the category (page 24, lines 17-19; Figure 8, block 880).

The structure corresponding to the claimed functions in Claim 21 is described at least at page 7, line 13 – page 8, line 6; Figure 1, element 104; Figure 2.

(vi) Grounds of Rejection to be Reviewed on Appeal

Whether Claims 1-4, 6-14, 16-24, and 26-30 are unpatentable under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,584,120 to Yun.

(vii) Argument

Claims 1-4, 6-14, 16-24, and 26-30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,584,120 to Yun. It is respectfully submitted that the claims are not anticipated by the applied art, as Yun does not disclose all elements of the claimed invention.

The claimed invention is a method, computer program product, and apparatus for registering services, while Yun discloses a method of creating descriptions of data of interest in order to extract data of interest (Yun Abstract).

More specifically, independent Claims 1, 11, and 21 recite receiving a registration request with an identified category into which the service is to be registered. In contrast, Yun discloses nothing about identifying a category in an initial request, but rather states that the “author” decides if the type of information/good/service fits into an existing category (Yun Col. 6, lines 12-20). Yun does not specifically define who the “author” is, but Applicant believes that the author is the person creating the descriptions of data of interest. There is simply no disclosure in Yun of a registration request containing a category into which the service is to be registered.

Further, independent Claims 1, 11, and 21 recite determining if the identified category should be used based on a canonical service description associated with the identified category. Yun does not disclose how it is determined which category to use (existing or new), other than to say the “author decides whether a particular type of information, good, or service available at the web site, fits into an existing category, or sub-category” (Yun Col. 6, lines 12-20). If a new category is to be used, Yun does not

discuss at all how that new category is determined. Certainly, Yun does not disclose use of a canonical service description for such a determination, as recited in independent Claims 1, 11, and 21.

As Yun does not disclose receiving a registration request with an identified category into which the service is to be registered or disclose determining if the identified category should be used based on a canonical service description associated with the identified category, as recited in independent Claims 1, 11, and 21, independent Claims 1, 11, and 21 are patentably distinct from Yun. Since Claims 2-4 and 6-10 depend from Claim 1, Claims 12-14 and 16-20 depend from Claim 11, and Claims 22-24 and 26-30 depend from Claim 21, the dependent claims are also patentably distinct for at least the reasons described above.

Conclusion

For any one or more of the above reasons, Yun does not disclose, teach or suggest Applicant's claimed invention. Applicant submits that the application claims 1-4, 6-14, 16-24 and 26-30 are in condition for allowance. Therefore, reconsideration and withdrawal of the present rejections are respectfully requested.

Respectfully Submitted,

/Brian J. Teague/

Date: October 13, 2011

Brian J. Teague
Attorney for Applicant
Registration No. 55,670

PATENT LAW OF VIRGINIA, PLLC
PO Box 9319
Richmond, VA 23227
804-248-8539 (voice)
804-955-4180 (facsimile)
brian@patentlawva.com
Customer No. **77242**

(viii) Claims Appendix

1. (Rejected) A method, in a data processing system, of registering services in a taxonomy, comprising:

receiving a registration request at the data processing system, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered;

determining if the service description should be registered in the identified category based on a canonical service description associated with the category;

registering the service description in the identified category using the data processing system if the determination is that the service description should be registered in the identified category; and

if it is determined that the service description should not be registered in the category, determining whether a request to add a new category is received.

2. (Rejected) The method of claim 1, wherein the canonical service description identifies minimum criteria for the category.

3. (Rejected) The method of claim 1, wherein registering the service description in the category includes storing the service description and an associated model description in a storage in association with the category.

4. (Rejected) The method of claim 1, wherein the method is implemented in a service broker within at least one network.

5. (Canceled)

6. (Rejected) The method of claim 1, wherein if a request to add a new category is received, a determination is made as to whether to add the new category, and wherein if the new category is added, the service description is registered in association with the new category.

7. (Rejected) The method of claim 1, wherein the canonical service description includes information identifying minimum requirements of the category regarding one or more of security requirements, privacy requirements and communication protocol requirements.

8. (Rejected) The method of claim 1, wherein if it is determined that the service description should not be registered in the category, the method further comprises:

searching the taxonomy for an alternate category in which the service description should be registered; and

registering the service description in the alternate category.

9. (Rejected) The method of claim 8, wherein searching the taxonomy for an alternate category includes searching one or more of sibling, parent and child categories of the identified category within a predetermined range of the identified category in the taxonomy.

10. (Rejected) The method of claim 8, wherein searching the taxonomy for an alternate category includes searching the taxonomy for a category in which the service description meets requirements of a canonical service description associated with the alternate category.

11. (Rejected) A computer program product in a computer readable medium for registering services in a taxonomy, comprising:

first instructions for receiving a registration request, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered;

second instructions for determining if the service description should be registered in the identified category based on a canonical service description associated with the category;

third instructions for registering the service description in the identified category if the determination is that the service description should be registered in the identified category; and

fourth instructions for determining whether a request to add a new category is received if it is determined that the service description should not be registered in the category.

12. (Rejected) The computer program product of claim 11, wherein the canonical service description identifies minimum criteria for the category.

13. (Rejected) The computer program product of claim 11, wherein the third instructions for registering the service description in the category includes instructions for storing the service description and an associated model description in a storage in association with the category.

14. (Rejected) The computer program product of claim 11, wherein the computer program product is executed in a service broker within at least one network.

15. (Canceled)

16. (Rejected) The computer program product of claim 11, further comprising fifth instructions for determining whether to add the new category, if a request to add a new category is received, and sixth instructions for registering the service description in association with the new category, if the new category is added.

17. (Rejected) The computer program product of claim 11, wherein the canonical service description includes information identifying minimum requirements of the category regarding one or more of security requirements, privacy requirements and communication protocol requirements.

18. (Rejected) The computer program product of claim 11, further comprising:
fifth instructions for searching the taxonomy for an alternate category in which the service description should be registered if the result of execution of the second instructions is that the service description should not be registered in the category; and
sixth instructions for registering the service description in the alternate category if an alternate category is identified by execution of the fourth instructions.

19. (Rejected) The computer program product of claim 18, wherein the fifth instructions for searching the taxonomy for an alternate category includes instructions for searching one or more of sibling, parent and child categories of the identified category within a predetermined range of the identified category in the taxonomy.

20. (Rejected) The computer program product of claim 18, wherein the fifth instructions for searching the taxonomy for an alternate category includes instructions for searching the taxonomy for a category in which the service description meets requirements of a canonical service description associated with the alternate category.

21. (Rejected) An apparatus for registering services in a taxonomy, comprising:

means for receiving a registration request, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered;

means for determining if the service description should be registered in the identified category based on a canonical service description associated with the category;

means for registering the service description in the identified category if the determination is that the service description should be registered in the identified category; and

means for determining whether a request to add a new category is received if it is determined that the service description should not be registered in the category.

22. (Rejected) The apparatus of claim 21, wherein the canonical service description identifies minimum criteria for the category.

23. (Rejected) The apparatus of claim 21, wherein the means for registering the service description in the category includes means for storing the service description and an associated model description in a storage in association with the category.

24. (Rejected) The apparatus of claim 21, wherein the apparatus is part of a service broker within at least one network.

25. (Canceled)

26. (Rejected) The apparatus of claim 21, further comprising means for determining whether to add the new category, if a request to add a new category is received, and means for registering the service description in association with the new category, if the new category is added.

27. (Rejected) The apparatus of claim 21, wherein the canonical service description includes information identifying minimum requirements of the category regarding one or more of security requirements, privacy requirements and communication protocol requirements.

28. (Rejected) The apparatus of claim 21, further comprising:
means for searching the taxonomy for an alternate category in which the service description should be registered if the means for determining indicates that the service description should not be registered in the category; and
means for registering the service description in the alternate category if an alternate category is identified by the means for searching.

29. (Rejected) The apparatus of claim 28, wherein the means for searching the taxonomy for an alternate category includes means for searching one or more of sibling, parent and child categories of the identified category within a predetermined range of the identified category in the taxonomy.

30. (Rejected) The apparatus of claim 28, wherein the means for searching the taxonomy for an alternate category includes means for searching the taxonomy for a category in which the service description meets requirements of a canonical service description associated with the alternate category.

31. (Canceled)

(ix) Evidence Appendix.

None

(x) Related Proceedings

The Decisions on Appeal of The Board of Patent Appeals and Interferences for following prior appeals are attached herein:

<u>Application Serial No.</u>	<u>Appeal No.</u>
09/758,112	2009-6740
09/753,964	2007-3758

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2
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4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
6
7

8 *Ex parte* TOUFIC BOUBEZ, STEPHEN L. BURBECK, JAMES B.
9 CASLER, STEPHEN G. GRAHAM, and MARYANN HONDO
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12 Appeal 2009-006740
13 Application 09/758,112
14 Technology Center 3600
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18 *Before* MURRIEL E. CRAWFORD, ANTON W. FETTING, and
19 BIBHU R. MOHANTY, *Administrative Patent Judges*.
20

21 CRAWFORD, *Administrative Patent Judge*.
22
23

24 DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 (2002) from a Final Rejection of claims 1-31. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellants invented online systems and methods for categorizing services using canonical service descriptions (Spec. 1:21-22).

Independent claim 1 under appeal reads as follows:

1. A method, in a data processing system, of registering services in a taxonomy, comprising: receiving a registration request at the data processing system, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered; determining if the service description should be registered in the identified category based on a canonical service description associated with the category; and registering the service description in the identified category using the data processing system if the determination is that the service description should be registered in the identified category.¹

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Poon

US 2002/0062265 A1

May 23, 2002

¹ The claims set forth in the Claims Appendix of the Replacement Appeal Brief filed July 13, 2007 do not appear to include the changes made to the claims in the Amendment filed March 28, 2005. As that Amendment was entered and considered by the Examiner in the Office Action mailed June 28, 2005, we refer to those claims set forth in the Amendment in deciding this appeal.

The Examiner rejected claims 1-31 under 35 U.S.C. § 102(e) as being unpatentable over Poon.

ISSUES

Did the Examiner err in asserting that the subject matter of independent claims 11 and 21 is anticipated by Poon?

Did the Examiner err in asserting that the subject matter of independent claims 1 and 31 is anticipated by Poon?

Did the Examiner err in asserting that the subject matter of dependent claims 2-10 is anticipated by Poon?

FINDINGS OF FACT

Poon

The client browser 336 within the client application 332 receives category hierarchy data from the server application 312 at step 405. The category hierarchy data includes category and subcategory information. Using the category data, the client browser 336 performs the category selection process as follows. Once the user is ready to select an item category, at step 410, a decision is made whether a category number is available to the user. If the user has previously selected the same category and subcategories and has stored the category number associated with the category and the respective subcategories, the user enters the category number at step 420. As a result, based on the category number, the respective category and related subcategories are selected and displayed by the client browser 336 in the respective fields ([0028]).

1 combination of broker 420, device 104, data processing system 200,
2 processors 202, 204, and memory 209 as means for performing the
3 aforementioned steps. Poon recites that the user performs at least the
4 determining step.

5 Accordingly, as this is a rejection under § 102(e), we will not sustain
6 this rejection.

7
8 *Independent Claims 1 and 31*

9 We are not persuaded that the Examiner erred in asserting that Poon
10 anticipates the subject matter of independent claims 1 and 31 (App. Br. 12-
11 14). Unlike independent claims 11 and 21, independent claims 1 and 31 are
12 method claims. Accordingly, Poon's disclosure of the user performing the
13 "determining" step is sufficient to anticipate the recited aspects.

14 Moreover, Poon discloses that once the number of possible
15 subcategories has been exhausted, the user has the option to record the
16 category number of the selected category for the particular auction item with
17 web server 310 at step 445 ([0029]). This corresponds to the "receiving"
18 and "registering" steps recited in independent claims 1 and 31.

19
20 *Dependent Claims 2-10*

21 We are persuaded that the Examiner erred in asserting that Poon
22 anticipates the subject matter of some of dependent claims 2-10 (App. Br.
23 12-14). For claim 2, Poon discloses a "canonical service description
24 identifi[ying] minimum criteria for the category," as Poon's category, at a
25 minimum, includes a title which corresponds to "minimum criteria." *See In*
26 *re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)

(during examination of a patent application, a pending claim is given the broadest reasonable construction consistent with the specification and should be read in light of the specification as it would be interpreted by one of ordinary skill in the art).

For claim 3, Poon's recollection of the particular auction item in web server 310 with a selected category corresponds to the recited "storing the service description and an associated model description in a storage in association with the category."

For claims 5 and 6, we agree with Appellants. Poon does not disclose requesting to add a new category. All queries to server application 312 merely bring up existing categories.

For claim 7, we agree with Appellants that Poon does not disclose security requirements, privacy requirements, and communications protocol requirements. However, because such requirements are nothing more than printed matter, we use our authority under 37 C.F.R. § 41.50(b) (2009), and enter a new ground of rejection for this claim under 35 U.S.C. § 103(a) as being obvious over Poon. *See In re Gulack*, 703 F.2d 1381, 1385-86 (Fed Cir. 1983) (where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability).

For claim 8, the user in Poon performs the recited steps of searching for and registering the auction item under alternate categories.

For claims 4, 9, and 10, Appellants only argue that they depend from allowable independent claim 1. Accordingly, we sustain the rejections of those claims.

DECISION

The decision of the Examiner to reject claims 1-4, 8-10, and 31 is affirmed.

The decision of the Examiner to reject claims 5, 6, and 11-30 is reversed.

Using our authority under 37 C.F.R. § 41.50(b), we newly reject claim 7 under 35 U.S.C. § 103(a) as being obvious over Poon.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record

No time period for taking any subsequent action in connection with
this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.
§ 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART; 37 C.F.R. § 41.50(b)

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IBM CORPORATION
3039 CORNWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
RESEARCH TRIANGLE PARK, NC 27709

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOUFIC BOUBEZ, STEPHEN L. BURBECK,
JAMES B. CASLER, STEPHEN G. GRAHAM, and
MARYANN HONDO

Appeal 2007-3758
Application 09/753,964
Technology Center 3600

Decided: September 17, 2008

Before WILLIAM F. PATE, III, ANTON W. FETTING, and DAVID B.
WALKER, *Administrative Patent Judges*.

WALKER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134(a) (2002) from the final rejection of claims 1-30. We reverse.

Representative claim 1 reads as follows:

1. A method in a data processing system of verifying a categorization of a service in a taxonomy, comprising:

receiving a registration request at the data processing system, the registration request including a service description and an identification of a category within the taxonomy in which the service is to be registered;

applying one or more canonical service description tests to the service description to determine if the service description should be registered in the category; and

registering the service description in the identified category using the data processing system if a result of applying the one or more canonical service description tests is that the service description should be registered in the identified category.

The reference set forth below is relied upon as evidence in support of the rejection:

Poon

US 2002/0062265 A1

May 23, 2002

Claims 1-30 stand rejected under 35 U.S.C. § 102(e) as anticipated by Poon. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987).

Each of the rejected claims requires “applying one or more canonical service description tests to the service description to determine if the service description should be registered in the category.” The Specification describes the use of canonical service descriptions (CSDs) that permit an automatic search of the categories in a taxonomy by searching for a matching CSD, i.e., a CSD that matches a requested CSD or provides

minimum requirements corresponding to requirements of a search query. Such a search does not require input from a human user at runtime because each service categorized into a particular category is guaranteed to implement at least the functionality and APIs designated by the CSD of that category (Specification 13:12-19).

The Examiner found that Poon teaches the required test by testing whether a subcategory has related subcategories, and if it does not, the user has the option to register the subcategory (Answer 5, citing Poon 50:[0029]). According to the Appellants,

Poon fails to teach applying one or more canonical service description tests to the service description to determine if the service description should be registered in the category. The server of Poon merely determines if there are related subcategories associated with the category selection received from the user. Nowhere in Poon is a test applied to a service description to determine if the service description should be registered in the category as there is no service description received from the client in the Poon system.

(Br. 13). The Appellants argue that determining if a category has related subcategories is not equivalent to applying canonical service description tests to the service description to determine if the service description should be registered in the category (*Id.*).

We agree with the Appellants. Poon does not teach any sort of test that applies a CSD to determine whether the service description should be registered in the category as required by each of the independent claims. Because each of the appealed claims includes the disputed claim limitation,

the Appellants have shown that the Examiner erred in rejecting claims 1-30 as anticipated by Poon.

The decision of the Examiner is reversed.

REVERSED

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DUKE W. YEE
YEE & ASSOCIATES, P.C.
P.O. BOX 802333
DALLAS, TX 75380